

Date: 9/16/98**Time:** 5:19 PM**Pages:** 28**Sender:** 312 922 7747**Fax Number:****Subject:****Company:** SEP. 16. 1998 4:23PM DVORAK & ORUM**Type:** Fax NO. 5185 P. 16/28**ABSTRACT**

Silver alloys having useful work hardening performance in addition to firescale resistance reduced porosity and oxide formation, and reduced grain size relative to traditional sterling silver alloys, comprising at least 86% by weight silver about 0.5 - 5.5% by weight copper, about 0.02 - 6% by weight of a firescale resisting additive selected from one or a mixture of zinc and silicon, and about 0.01 - 2.5% by weight germanium. Master alloys for production of the above alloys are also provided for having the general composition comprising, by weight, about 2.5 - 99.85% copper, about 0.1 - 35% zinc or silicon or mixtures thereof, and about 0.05 - 12.5% germanium.